

HAWAII, ISLAND OF KAUAI

16114000 LIMAHLI STREAM NEAR WAINIHA

LOCATION.--Lat 22°13'15", long 159°34'48", Old Hawaiian Datum, Hydrologic Unit 20070000, on left bank 0.2 mi upstream from intersection with Kuhio Highway, and entrance to Haena State Park.

DRAINAGE AREA.--1.36 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1994 to September 2005 (discontinued).

GAGE.--Water-stage recorders and natural control. Elevation of gage is 200 ft above mean sea level, by altimeter.

REMARKS.--Records computed by Clayton Yoshida. Records fair. Limahuli Gardens diverts water through a 4-inch pipe upstream of station.

AVERAGE DISCHARGE.--7 years (water years 1999-2005), 8.12 ft<sup>3</sup>/s (5,880 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 985 ft<sup>3</sup>/s, December 11, 2000, gage height, 5.24 ft; minimum, 3.4 ft<sup>3</sup>/s, September 27-30, 2003.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan 26	0250	389	3.46	Sep 15	0550	522	3.92
Feb 2	0650	*802	*4.75				

Minimum discharge, 4.7 ft<sup>3</sup>/s, on several days, gage height, 0.42 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	11	11	51	52	6.5	8.7	6.0	5.4	6.9	5.4	5.0
2	5.5	7.9	9.6	14	241	6.1	9.0	11	5.4	6.7	5.3	4.7
3	5.4	6.8	8.6	9.1	37	6.0	8.9	7.7	5.3	5.9	5.3	4.7
4	11	10	7.6	7.5	25	5.9	9.5	6.2	5.2	19	5.2	6.3
5	6.1	47	6.9	9.9	16	18	7.6	5.9	5.2	9.9	5.1	5.3
6	5.9	19	7.0	8.5	9.9	9.6	7.3	5.8	5.2	6.8	5.1	5.0
7	22	11	7.3	6.8	7.9	7.1	7.5	5.7	5.3	6.2	5.0	4.8
8	11	8.1	7.7	7.0	7.2	6.5	15	5.7	5.2	7.1	5.1	4.8
9	7.6	7.1	8.4	7.9	6.8	20	13	5.6	6.0	19	5.0	4.9
10	6.8	6.4	6.6	6.4	7.2	12	9.3	5.6	6.1	12	5.1	5.1
11	6.3	6.1	6.2	7.0	27	7.8	13	5.6	5.4	10	5.1	5.1
12	6.1	6.0	6.1	6.1	45	7.1	9.6	5.5	5.2	18	5.0	5.1
13	6.0	18	6.0	6.2	19	7.3	13	5.5	5.2	10	5.0	17
14	5.9	37	5.9	6.1	10	6.6	18	5.5	5.1	8.2	5.0	174
15	5.9	12	5.8	5.8	8.0	6.7	14	5.5	5.1	7.5	5.1	115
16	5.8	11	5.8	8.4	7.2	6.2	9.8	5.4	5.1	10	5.0	37
17	5.7	48	9.1	13	6.9	6.0	7.8	5.4	5.2	11	5.0	16
18	6.0	21	9.2	8.4	6.5	5.8	7.0	5.5	5.2	8.3	4.9	9.3
19	8.9	11	6.1	6.6	6.3	5.9	6.6	5.4	15	6.9	4.9	7.0
20	6.7	8.4	6.0	6.1	6.1	5.7	6.3	5.4	8.0	6.4	4.9	7.5
21	6.1	7.4	5.8	30	6.0	5.6	6.2	5.4	6.0	6.0	4.9	11
22	5.8	7.5	6.0	10	6.0	5.6	6.0	9.4	5.5	6.1	4.8	13
23	5.9	6.7	5.8	7.5	9.1	5.5	5.9	9.8	5.3	6.1	4.7	15
24	6.8	6.3	5.6	6.7	9.5	5.4	5.9	6.1	5.3	5.8	4.7	9.7
25	6.3	6.1	5.7	6.4	12	24	5.8	5.8	5.2	5.6	4.9	6.8
26	5.9	14	6.1	104	12	30	5.8	5.6	5.2	5.5	4.7	6.2
27	7.1	10	8.1	13	9.1	10	5.8	5.6	5.2	5.4	4.7	5.6
28	10	9.3	7.0	8.5	7.3	8.5	5.8	5.9	5.5	6.6	4.7	5.5
29	7.8	21	5.9	12	---	53	5.6	6.0	6.3	6.8	5.0	5.3
30	13	14	16	11	---	18	5.6	5.5	6.4	5.6	4.9	17
31	15	---	33	19	---	11	---	5.5	---	5.5	4.7	---
TOTAL	239.8	415.1	251.9	429.9	623.0	339.4	259.3	190.5	174.7	260.8	154.2	538.7
MEAN	7.74	13.8	8.13	13.9	22.2	10.9	8.64	6.15	5.82	8.41	4.97	18.0
MAX	22	48	33	104	241	53	18	11	15	19	5.4	174
MIN	5.4	6.0	5.6	5.8	6.0	5.4	5.6	5.4	5.1	5.4	4.7	4.7
AC-FT	476	823	500	853	1,240	673	514	378	347	517	306	1,070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2005, BY WATER YEAR (WY)

MEAN	5.81	8.84	10.1	8.94	11.1	9.89	11.3	6.34	6.54	6.06	5.81	6.92
MAX	7.74	13.8	14.5	13.9	22.3	26.1	16.5	9.14	14.0	9.12	7.72	18.0
(WY)	(2005)	(2005)	(2001)	(2005)	(2005)	(2004)	(2000)	(2002)	(2004)	(1999)	(2001)	(2005)
MIN	4.56	4.59	6.16	4.34	4.64	4.22	5.31	4.44	3.80	3.90	3.82	3.55
(WY)	(2003)	(2004)	(2003)	(2001)	(2000)	(2001)	(2002)	(2003)	(2003)	(2003)	(2003)	(2003)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1999 - 2005	
ANNUAL TOTAL	3,867.4		3,877.3			
ANNUAL MEAN	10.6		10.6		8.12	
HIGHEST ANNUAL MEAN					10.6	2005
LOWEST ANNUAL MEAN					6.65	2002
HIGHEST DAILY MEAN	107	Apr 3	241	Feb 2	241	Feb 2, 2005
LOWEST DAILY MEAN	3.6	Jan 9	4.7	Aug 23	3.4	Sep 27, 2003
ANNUAL SEVEN-DAY MINIMUM	3.8	Jan 5	4.7	Aug 22	3.4	Sep 24, 2003
ANNUAL RUNOFF (AC-FT)	7,670		7,690		5,880	
10 PERCENT EXCEEDS	21		16		12	
50 PERCENT EXCEEDS	6.3		6.4		5.6	
90 PERCENT EXCEEDS	4.7		5.1		4.0	